## WEST

# **Freeform Search**

Database:	US Patents Full-Text Database US Pre-Grant Publication Full-Text Database JPO Abstracts Database EPO Abstracts Database Derwent World Patents Index IBM Technical Disclosure Bulletins				
Term:	L13 not l11				
Display: Generate:	Documents in <u>Display Format</u> : ☐ Starting with Number ☐ Starting with Number ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				
	Search Clear Help Logout Interrupt  Main Menu Show S Numbers Edit S Numbers Preferences Cases				

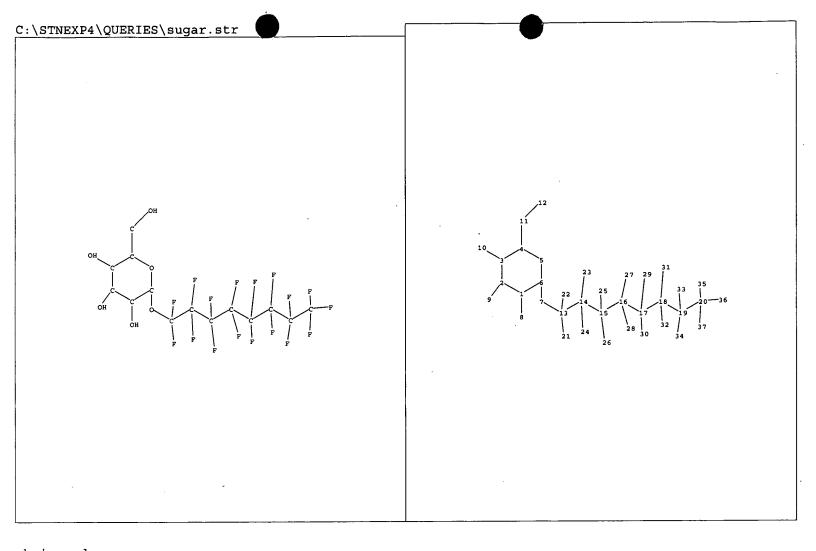
# **Search History**

**DATE: Tuesday, July 16, 2002** <u>Printable Copy</u> <u>Create Case</u>

Set Name		Hit Count 9	Set Name result set
DB=US	SPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ		
<u>L14</u>	L13 not l11	3	<u>L14</u>
<u>L13</u>	I2 and I3 and I10	16	<u>L13</u>
<u>L12</u>	L11 not I9	11	<u>L12</u>
<u>L11</u>	l8 and l10	13	<u>L11</u>
<u>L10</u>	perfluoro\$	36673	<u>L10</u>
<u>L9</u>	18 and 14	2	<u>L9</u>
<u>L8</u>	I2 same I3	979	<u>L8</u>
<u>L7</u>	I2 and I3	1122	<u>L7</u>
<u>L6</u>	I3 same I4	0	<u>L6</u>
<u>L5</u>	I2 same I4	4	<u>L5</u>
<u>L4</u>	perfluoroalkyl	19858	<u>L4</u>
<u>L3</u>	diamagnetic	3745	<u>L3</u>
<u>L2</u>	paramagnetic	10062	<u>L2</u>
DB=USPT; PLUR=YES; OP=ADJ			
<u>L1</u>	6300296.pn. or 5886109.pn. or 5846516.pn. or 5786469.pn. or 5679459.pn. or 5567765.pn. or 5502094.pn. or 5491083.pn. or 5384254.pn. or 5342772.pn. or 5243037.pn. or 4960951.pn. or 4957904.pn.	13	<u>L1</u>

END OF SEARCH HISTORY

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```
chain nodes :
   7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
                                                               25
                                                                  26
                                                                      27 28 29 30
   31 32 33 34 35 36 37
ring nodes :
   1 2 3 4 5
chain bonds :
   1-8 2-9 3-10 4-11 6-7 7-13 11-12 13-14 13-21 13-22 14-15 14-23 14-24 15-16
   15-25 15-26 16-17 16-27 16-28 17-18 17-29 17-30 18-19 18-31 18-32 19-20 19-33
   19-34 20-35 20-36 20-37
ring bonds :
   1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
   1-2 1-6 1-8 2-3 2-9 3-4 3-10 4-5 5-6 6-7 7-13
                                                    11-12
exact bonds :
   4-11 13-14 13-21 13-22 14-15 14-23 14-24 15-16 15-25 15-26 16-17 16-27 16-28
   17-18 17-29 17-30 18-19 18-31 18-32 19-20 19-33 19-34 20-35 20-36 20-37
Match level :
   1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
   11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS
```

20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS

Welcome to STN International! Enter x:x

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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS
                 BLAST(R) searching in REGISTRY available in STN on the Web
NEWS
         Jan 25
                 FSTA has been reloaded and moves to weekly updates
NEWS
         Jan 29
         Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update
NEWS 4
                 frequency
NEWS
         Feb 19
                 Access via Tymnet and SprintNet Eliminated Effective 3/31/02
      5
                 Gene Names now available in BIOSIS
NEWS 6 Mar 08
                 TOXLIT no longer available
NEWS 7
         Mar 22
                 TRCTHERMO no longer available
NEWS 8 Mar 22
                 US Provisional Priorities searched with P in CA/CAplus
NEWS 9
         Mar 28
                 and USPATFULL
NEWS 10 Mar 28
                 LIPINSKI/CALC added for property searching in REGISTRY
                 PAPERCHEM no longer available on STN. Use PAPERCHEM2
NEWS 11 Apr 02
instead.
NEWS 12 Apr 08
                 "Ask CAS" for self-help around the clock
                 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 13 Apr 09
                 ZDB will be removed from STN
NEWS 14 Apr 09
NEWS 15 Apr 19
                 US Patent Applications available in IFICDB, IFIPAT, and
IFIUDB
                 Records from IP.com available in CAPLUS, HCAPLUS, and
NEWS 16 Apr 22
ZCAPLUS
                 BIOSIS Gene Names now available in TOXCENTER
NEWS 17
         Apr 22
NEWS 18
         Apr 22
                 Federal Research in Progress (FEDRIP) now available
NEWS 19
         Jun 03
                 New e-mail delivery for search results now available
NEWS 20
         Jun 10
                 MEDLINE Reload
NEWS 21
         Jun 10
                 PCTFULL has been reloaded
NEWS 22
         Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS EXPRESS
              February 1 CURRENT WINDOWS VERSION IS V6.0d,
              CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
              AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS
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NEWS PHONE
              Direct Dial and Telecommunication Network Access to STN
              CAS World Wide Web Site (general information)
```

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> 5491083 4957904 5342772 5243037

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=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY 0.21 SESSION 0.21

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 14 JUL 2002 HIGHEST RN 438526-30-8 DICTIONARY FILE UPDATES: 14 JUL 2002 HIGHEST RN 438526-30-8

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> e [(1-perfluoroctylsulfonylpiperazine-4-carbonyl)-methyl]-mannopyranose/cn \*\*\*\* START OF FIELD \*\*\*\*

E3 0 --> (1-PERFLUOROCTYLSULFONYLPIPERAZINE-4-CARBONYL)-METHYL -MANN OPYRANOSE/CN

E4 1 !-BUTANAMINE, N-BUTYL-,

((1,2-.ETA.)-DECAHYDRODECABORATO(2-)

-.KAPPA.H1,.KAPPA.H2)CUPRATE(1-)/CN

E5 1 'HUMAN ALPHA-CATENIN' (HUMAN)/CN

E6 1 'HYG' TYPE I POLYKETIDE SYNTHASE (STREPTOMYCES

HYGROSCOPICUS

CLONE PAL58/PAL16 MODULE 1 REDUCED)/CN

E7 1 'HYG' TYPE I POLYKETIDE SYNTHASE (STREPTOMYCES

HYGROSCOPICUS

CLONE PAL58/PAL16 MODULE 2 REDUCED)/CN

E8 1 'HYG' TYPE I POLYKETIDE SYNTHASE (STREPTOMYCES

HYGROSCOPICUS

CLONE PAL58/PAL16 MODULE 3 REDUCED)/CN

E9 1 'HYG' TYPE I POLYKETIDE SYNTHASE (STREPTOMYCES

HYGROSCOPICUS

CLONE PAL58/PAL16 MODULE 4 REDUCED)/CN

E10 1 'UPENAMIDE/CN

E11 1 'UPENAMIDE DIOL/CN

E12 'UPENAMIDE S-MTPA ESTER/CN

=> e mannopyranose/cn

E1 1 MANNOPYRANO(2,3-D)OXAZOLE,

4,6-O-BENZYLIDENE-1-O-METHYL-2'-P

HENYL-, .ALPHA.-D-/CN

E2 1 MANNOPYRANO(2,3-D)OXAZOLE,

4,6-O-BENZYLIDENE-2'-(P-METHOXYPH

/

```
ENYL) -1-O-METHYL-, .ALPHA.-D-/CN
             1 --> MANNOPYRANOSE/CN
E3
                    MANNOPYRANOSE, .ALPHA.-D-/CN
             1
E4
                    MANNOPYRANOSE, .ALPHA.-D-, 1.FWDARW.6-POLYMERS/CN
E5
             1
                   MANNOPYRANOSE, .ALPHA.-D-, POLYMERS/CN
E6
             1
                   MANNOPYRANOSE, .BETA.-D-/CN
MANNOPYRANOSE, 1,1'-DITHIOBIS(1-DEOXY-/CN
E7
             1
E8
             1
                   MANNOPYRANOSE, 1,2,3,4,6-PENTAKIS-O-(TRIMETHYLSILYL)-/CN
E9
             1
                   MANNOPYRANOSE, 1,2,3,4,6-PENTAKIS-O-(TRIMETHYLSILYL)-,
E10
             1
. BETA
                    .-D-/CN
                    MANNOPYRANOSE, 1,2,3,4-TETRAACETATE 6-METHANESULFONATE,
E11
.BET
                    A.-D-/CN
                    MANNOPYRANOSE, 1,2,3,4-TETRAACETATE, .BETA.-D-/CN
E12
=> s e3
             1 MANNOPYRANOSE/CN
L1
=> d
L1
     ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
     46032-76-2 REGISTRY
RN
     Mannopyranose (6CI, 7CI, 9CI) (CA INDEX NAME)
CN
     STEREOSEARCH
FS
     C6 H12 O6
MF
CI
     COM
                  AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, USPATFULL
     STN Files:
LC
         (*File contains numerically searchable property data)
```

Relative stereochemistry.

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
=> e perflurorooctylsulfonylpiperazine/cn
                   PERFLUROHEXYLMETHYL METHACRYLATE-TRIETHOXYVINYLSILANE
E1
           . 1
COPOLY
                   MER/CN
                   PERFLUROOCTYLMETHANOL/CN
E2
             1
             0 --> PERFLUROROOCTYLSULFONYLPIPERAZINE/CN
E3
                   PERFLUTREN/CN
E4
             1
E5
             1
                   PERFOL PK 4/CN
```

```
PERFOLIATUMIN A/CN
E6
             1
                  PERFOLIATUMIN B/CN
E7
             1
             1
                  PERFOMEDIL/CN
E8
                  PERFORAQUASSIN A/CN
             1
E9
                 PERFORAQUASSIN B/CN
PERFORAQUASSIN C/CN
E10
             1
             1
E11
                  PERFORATIC ACID/CN
=> e perflurorooctyl/cn
                  PERFLUROHEXYLMETHYL METHACRYLATE-TRIETHOXYVINYLSILANE
COPOLY
                   MER/CN
                  PERFLUROOCTYLMETHANOL/CN
E2
             1
             0 --> PERFLUROROOCTYL/CN
E3
               PERFLUTREN/CN
E4
             1
                 PERFOL PK 4/CN
PERFOLIATUMIN A/CN
E5
             1
E6
             1
                 PERFOLIATUMIN B/CN
E7
             1
                 PERFOMEDIL/CN
E8
            1
E9
            1 PERFORAQUASSIN A/CN
            1 PERFORAQUASSIN B/CN
1 PERFORAQUASSIN C/CN
E10
E11
                 PERFORATIC ACID/CN
E12
            1
=> e sulfonylpiperazine/cn
            1
               SULFONYLDIVALERIC ACID/CN
E2
             1
                  SULFONYLLIGNIN/CN
E3
             0 --> SULFONYLPIPERAZINE/CN
                  SULFONYLUREA RECEPTOR (CRICETUS CRICETUS HIT-T15 CELL GENE
F.4
             1
S
                   UR PRECURSOR)/CN
                   SULFONYLUREA RECEPTOR (DROSOPHILA MELANOGASTER)/CN
E5
             1
                   SULFONYLUREA RECEPTOR (HAMSTER 1498-AMINO ACID ISOFORM )/CN
E6
             1
                   SULFONYLUREA RECEPTOR (HAMSTER)/CN
E7
             1
                   SULFONYLUREA RECEPTOR (HUMAN GENE SUR C-TERMINAL
E8
FRAGMENT)/C
                   SULFONYLUREA RECEPTOR (HUMAN GENE SUR1)/CN
E9
             2
            1
                   SULFONYLUREA RECEPTOR (HUMAN)/CN
E10
                   SULFONYLUREA RECEPTOR (RAT)/CN
E11
            1
                   SULFONYLUREA RECEPTOR (RATTUS NORVEGICUS RINM5F CELL GENE
E12
             1
                   R PRECURSOR)/CN
=> fil caplus uspatfull biosis embase medline
                                                  SINCE FILE
                                                                 TOTAL
COST IN U.S. DOLLARS
                                                       ENTRY
                                                                SESSION
                                                        7.10
                                                                  7.31
FULL ESTIMATED COST
FILE 'CAPLUS' ENTERED AT 12:29:02 ON 16 JUL 2002
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FILE 'USPATFULL' ENTERED AT 12:29:02 ON 16 JUL 2002
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=> d his
      (FILE 'HOME' ENTERED AT 12:26:48 ON 16 JUL 2002)
     FILE 'REGISTRY' ENTERED AT 12:26:52 ON 16 JUL 2002
 [(1-PERFLUOROCTYLSULFONYLPIPERAZINE-4-CARBONYL)-METHYL]-MANNO
                E MANNOPYRANOSE/CN
L1
              1 S E3
                E PERFLUROROOCTYLSULFONYLPIPERAZINE/CN
                E PERFLUROROOCTYL/CN
                E SULFONYLPIPERAZINE/CN
     FILE 'CAPLUS, USPATFULL, BIOSIS, EMBASE, MEDLINE' ENTERED AT 12:29:02 ON
     16 JUL 2002
=> s l1
L2
            42 L1
=> s perfluoroalkyl
        18474 PERFLUOROALKYL
=> s 12(1)13
             0 L2(L) L3
L4
=> s 12 and 13
             0 L2 AND L3
=> s perfluoro?
        77307 PERFLUORO?
=> s 16(1)12
1.7
             0 L6(L) L2
=> s mannose
        90223 MANNOSE
L8
=> s 18 and 16
          331 L8 AND L6
L9
=> s 18(1)16
           294 L8(L) L6
L10
=> s paramagnetic or diamagnetic or diagnostic or pharmaceutical or contrast
agent or drug
   4 FILES SEARCHED...
     8803713 PARAMAGNETIC OR DIAMAGNETIC OR DIAGNOSTIC OR PHARMACEUTICAL OR
               CONTRAST AGENT OR DRUG
=> s l10 and l11
           184 L10 AND L11
L12
=> s 18(p)16
            22 L8(P) L6
L13
```

```
=> dup rem 113
PROCESSING COMPLETED FOR L13
                19 DUP REM L13 (3 DUPLICATES REMOVED)
=> d ibib abs
L14 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                               2002:142563 CAPLUS
DOCUMENT NUMBER:
                               136:209640
TITLE:
                               Use of metal complexes containing perfluoroalkyl as
                               contrast agents in MR-imaging for the representation
                               of plaques, tumors and necroses
                               Platzek, Johannes; Mareski, Peter; Niedballa, Ulrich;
INVENTOR(S):
                               Raduechel, Bernd; Weinmann, Hanns-Joachim;
Misselwitz,
                               Bernd
                               Schering Aktiengesellschaft, Germany
PATENT ASSIGNEE(S):
                               PCT Int. Appl., 387 pp.
SOURCE:
                               CODEN: PIXXD2
                               Patent
DOCUMENT TYPE:
LANGUAGE:
                               German
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                     APPLICATION NO. DATE
      PATENT NO.
                          KIND DATE
                                                     -----
      WO 2002013874
                          A2 20020221
                                                    WO 2001-EP8498
                                                                          20010723
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
          W: AE, AG, AL, AM, AI, AU, AZ, BA, BB, BG, BR, BI, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BL, CE, CG, CI, CM, GA, GA, GO, GW, ML, MP, NE, SN, TD, TG
                BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
      DE 10040380
                            A1
                                  20020228
                                                    DE 2000-10040380 20000811
      AU 2001077549
                            A5
                                  20020225
                                                     AU 2001-77549
                                                                           20010723
                                                 DE 2000-10040380 A 20000811
PRIORITY APPLN. INFO.:
                                                 WO 2001-EP8498
                                                                       W 20010723
                              MARPAT 136:209640
OTHER SOURCE(S):
      The invention relates to the use of metal complexes contg.
perfluoroalkyl,
      comprising a crit. micelle formation concn. < 10-3 mol/L, a hydrodynamic
      micelle diam. of (2 Rh) > 1 nm and a proton relaxivity in plasma (R1) >
10
      L/mmol, as contrast agents in MR imaging for the representation of
plaque,
      lymph node, infarcted and necrotic tissue and for independent
      representation of necrotic tissue and tumoral tissue. For example, the
Gd
      complex of 1,4,7-tris(carboxylatomethyl)-10-[(3-aza-4-oxo-5-
      methylpentanoyl-5-yl-N-(2-methoxyethyl)-N-(1H,1H,2H,2H,4H,4H,5H,5H-3-
      oxa)perfluorotridecyl)amide]-1,4,7,10-tetraazacyclododecane was prepd. in
      a multistep process from
1H, 1H, 2H, 2H, 4H, 4H, 5H, 5H-3-oxaperfluorotridecanoic
      acid and 2-methoxyethylamine, followed by redn. to the resp. amine and
      reaction with the Gd complex of 10-[1-(carboxymethylcarbamoyl)ethyl]-
```

1,4,7,10-tetraazacyclododecane-1,4,7-triacetic acid.

## => d 2 ibib abs

L14 ANSWER 2 OF 19 USPATFULL

ACCESSION NUMBER: 2001:173550 USPATFULL

TITLE: Foaming aqueous medium stable in the presence of

grease, stabilization of a foaming aqueous medium in

the presence of grease

INVENTOR(S): Bergeron, Vance, Lyons, France

Guerin, Gilles, Eaubonne, France

PATENT ASSIGNEE(S): Rhodia Chimie, Courbevoie Cedex, France (non-U.S.

corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6300296 WO 9833877	B1	20011009 19980806	
APPLICATION INFO.:	US 1999-355485 WO 1998-FR173		19991005 19980130 19991005 19991005	(9) PCT 371 date PCT 102(e) date

NUMBER DATE

19970131

PRIORITY INFORMATION: FR 1997-1049

DOCUMENT TYPE: Utility FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Lovering, Richard D.

LEGAL REPRESENTATIVE: Burns, Doane, Swecker & Mathis, L.L.P.

NUMBER OF CLAIMS: 2 EXEMPLARY CLAIM: 1

LINE COUNT: 664

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention concerns a foaming aqueous medium (FAM) capable of forming

a stable foam in the presence of grease (G). The foaming aqueous medium (FAM) of the present invention comprises water, at least one base surface-active agent (BSA) which comprises at least one amphiphilic additive (ADD), which is a fluorinated compound, compatible with said base surface-active agent (BSA). The present invention further concerns a liquid detergent composition for washing dishes by hand or textiles

by

hand comprising an effective amount of the foaming aqueous medium (FAM) of the present invention. The present invention also concerns a liquid composition for body hygiene, oral hygiene or body treatment comprising an effective amount of the foaming aqueous medium (FAM) of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

## => d 2 kwic

## L14 ANSWER 2 OF 19 USPATFULL

SUMM

. . . one or more saccharide unit(s) comprising from 5 to 6 carbon atoms (units derived from sugars, such as fructose, glucose, mannose, galactose, talose, gulose, allose, altose, idose, arabinose, xylose, lyxose and/or ribose) and the hydrophobic part of which comprises a unit. . . R.sub.F (CH.sub.2).sub.n --, where n can range from 2 to 20, preferably from 2 to 10, and R.sub.F represents a

perfluoroalkyl unit of formula C.sub.m F.sub.2m+1 with m being able to range from 1 to 10, preferably from 4 to 8, which are chosen from those exhibiting the characteristics defined above; mention may be made of monoesters of perfluoroalkylated fatty acids and of sugars, such as .alpha.,.alpha.-trehalose and sucrose, it being possible

for the monoester functional group to be represented by the formula R.sub.F (CH.sub.2).sub.n C(0), where n can range from 2 to 10 and R.sub.F represents a perfluoroalkyl unit of formula C.sub.m F.sub.2m+1 with m being able to range from 4 to 8, which are described in JAOCS,.

## => d 3 ibib abs

L14 ANSWER 3 OF 19 USPATFULL

1999:37221 USPATFULL ACCESSION NUMBER:

AZO group-containing high molecular weight compound TITLE:

for

block copolymerization

INVENTOR(S): Kitano, Hiromi, Toyama-ken, Japan

Shiraki, Kazuo, Kawagoe, Japan Yamashita, Yoshihisa, Osaka, Japan

Wako Pure Chemical Industries, Ltd., Osaka, Japan PATENT ASSIGNEE(S):

(non-U.S. corporation)

KIND NUMBER DATE

PATENT INFORMATION: US 5886109 19990323

APPLICATION INFO.: US 1997-847509 19970424 (8)

> NUMBER DATE

JP 1996-132622 19960430 PRIORITY INFORMATION:

JP 1996-135733 19960502

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

PRIMARY EXAMINER: Mullis, Jeffrey

Oliff & Berridge, PLC LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 2 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 1311

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An azo group-containing high molecular weight compound including

--COHN--, an ester linkage, or an amido linkage and a monomer units of

10 to 1000 derived from .alpha.,.beta.-ethylenically unsaturated

monomer

is effective for producing a block copolymer having two or more polymer segments different in structure by one-step reaction.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

#### => d 3 kwic

L14 ANSWER 3 OF 19 USPATFULL

. . . chloromethyl group, a bromomethyl group, a trifluoromethyl group, a 2-chloroethyl group, a 3-chloropropyl group, a 3-bromopropyl group, a 3,3,3-trifluoropropyl group, 2-perfluorooctylethyl

group, a **p rfluorooctyl** group, a 1-chlorodecyl group, a 1-chlorooctadecyl group, etc. As the cyano-containing alkyl group represented by R.sup.5, there can be exemplified. . . examples of

the

sugar are monosaccharides such as glucose, galactose, fructose, glucosamine, galactosamine, gluconic acid, 1-thio-D-glucose, 5-thio-D-glucose, xylose, ribose, mannose, etc.; disaccharides such as maltose, lactose, cellobiose, sucrose, trehalose, etc.; and trisaccharides such as maltotriose, N,N',N"-triacetylchitotriose, etc. As the aminoalkyl. . .

DETD

. . . chloromethyl group, a bromomethyl group, a trifluoromethyl group, a 2-chloroethyl group, a 3-chloropropyl group, a 3-bromopropyl group, a 3,3,3-trifluoropropyl group, 2-perfluorooctylethyl group, a perfluorooctyl group, a 1-chlorodecyl group, a 1-chlorooctadecyl group, etc. As the cyano-containing alkyl group represented by R.sup.8, there can be exemplified. . . Specific examples of the sugar are monosaccharides such as glucose, galactose, fructose, glucosamine, galactosamine, gluconic acid, 1-thio-D-glucose, 5-thio-D-glucose, xylose, ribose, mannose, etc.; disaccharides such as maltose, lactose, cellobiose, sucrose, trehalose, etc.; and trisaccharides such as maltotriose, N,N',N"-triacetylchitotriose, etc. As the aminoalkyl. . .

## => d 4 ibib abs

L14 ANSWER 4 OF 19 USPATFULL

ACCESSION NUMBER: 1998:153841 USPATFULL

TITLE: Perfluoroalkylated amphiphilic phosphorus compounds:

preparation and biomedical applications

INVENTOR(S): Riess, Jean G., Nice, France

Greiner, Jacques, Nice, France Milius, Alain, Nice, France Vierling, Pierre, Nice, France Guillod, Frederic, Nice, France Gaentzler, Sylvie, Nice, France

PATENT ASSIGNEE(S): Alliance Pharmaceutial Corp., San Diego, CA, United

States (U.S. corporation)

APPLICATION INFO.: US 1992-DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Lovering, Richard D.

LEGAL REPRESENTATIVE: Knobbe, Martens, Olson & Bear

NUMBER OF CLAIMS: 32 EXEMPLARY CLAIM: 1,16,18

NUMBER OF DRAWINGS: 9 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 1428

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Perfluoroalkylated amphiphilic phosphorus compounds, corresponding to the formulae: ##STR1## wherein V is O or S;

R.sup.1, R.sup.2 and R.sup.3 are H or substituted or unsubstituted perfluoroalkylated or hydrocarbon radicals;

provided that

R.sup.1, R.sup.2 or R.sup.3 is a perfluoroalkylated radical; and Y and

are radicals which can bear a part derived from a sugar, a polyol, or a hydrophilic polymer such as polyethyleneglycol, a perfluoroalkylated part or a part derived from a pharmaceutically active molecule, and method for their preparation and use. These compounds can be included

in

preparations, emulsions, dispersions, gels, microemulsions, notably for biomedical uses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 5 ibib abs

L14 ANSWER 5 OF 19 USPATFULL

ACCESSION NUMBER:

1998:88947 USPATFULL

TITLE:

1-C-perflouroalkyl glycosides, preparation process and

uses thereof

INVENTOR(S):

Lavaire, Sandrine, Reims, France

Plantier-Royon, Richard, Reims, France Portella, Charles, Cormontreuil, France CECA S.A., France (non-U.S. corporation)

PATENT ASSIGNEE(S):

KIND NUMBER DATE

PATENT INFORMATION:

US 5786469 19980728

US 1997-879364 APPLICATION INFO.:

19970620 (8)

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PRIORITY INFORMATION:

FR 1996-7692 19960620

NUMBER

DOCUMENT TYPE: FILE SEGMENT:

Utility Granted

PRIMARY EXAMINER:

Kight, John

ASSISTANT EXAMINER:

Lee, Howard C.

LEGAL REPRESENTATIVE:

Millen, White, Zelano & Branigan, P.C.

DATE

NUMBER OF CLAIMS:

15

EXEMPLARY CLAIM:

1

LINE COUNT:

626

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to 1-C-perfluoroalkyl glucosides consisting essentially of a monosaccharide having an anomeric carbon directly linked to a perfluoroalkyl radical and a hydroxyl group. These glycosides are prepared by a process comprising: (a) reacting an aldonolactone with a hydroxyl protecting group; (b) reacting the

product

of step (a) with a compound of formula R.sub.F -M in which R.sub.F represents a linear or branched perfluoroalkyl radical containing from

may

to 12 carbon atoms, and M represents Li or MgX, X being a halogen; and (c) liberating the hydroxyl group. The 1-C-perfluoroalkyl glycosides

be used as surfactants and as flame retardants.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 6 ibib abs

L14 ANSWER 6 OF 19 USPATFULL

ACCESSION NUMBER: 97:96663 USPATFULL

TITLE: Perfluorinated amphiphilic phosphorous compounds:

liposomal compositions

INVENTOR(S): Riess, Jean G., Nice, France

Greiner, Jacques, Nice, France Milius, Alain, Nice, France Vierling, Pierre, Nice, France Guillod, Frederic, Nice, France Gaentzler, Sylvie, Nice, France

PATENT ASSIGNEE(S): Alliance Pharmaceutical Corp., San Diego, CA, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5679459 19971021 APPLICATION INFO.: US 1995-467467 19950606

RELATED APPLN. INFO.: Division of Ser. No. US 1992-893227, filed on 3 Jun

1992

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Lovering, Richard D.

LEGAL REPRESENTATIVE: Knobbe, Martens Olson & Bear

NUMBER OF CLAIMS: 4 EXEMPLARY CLAIM: 1,2

NUMBER OF DRAWINGS: 9 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 1308

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Perfluoroalkylated amphiphilic phosphorus compounds, corresponding to

the formulae: ##STR1## wherein V is O or S;

R.sup.1, R.sup.2 and R.sup.3 are H or substituted or unsubstituted

perfluoroalkylated or hydrocarbon radicals;

provided that

R.sup.1, R.sup.2 or R.sup.3 is a perfluoroalkylated radical; and Y and

are radicals which can bear a part derived from a sugar, a polyol, or a hydrophilic polymer such as polyethyleneglycol, a perfluoroalkylated part or a part derived from a pharmaceutically active molecule, and method for their preparation and use. These compounds can be included

in
 preparations, emulsions, dispersions, gels, microemulsions, notably for
 biomedical uses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 7 ibib abs

Z

L14 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:695896 CAPLUS

DOCUMENT NUMBER: 127:307551

TITLE: Sugar carbamates with mixed fluorocarbon/hydrocarbon

double-chains as vesicle-forming non-ionic

amphiphiles

AUTHOR(S): Lucas, P.; Trabelsi, H.; Szonyi, S.; Cambon, A.

CORPORATE SOURCE: Laboratoire de Chimie Organique du Fluor, Universite

de Nice-Sophia Antipolis, NICE, F - 06108, Fr.

SOURCE:

Conference on Colloid Chemistry: In Memoriam Aladar Buzagh, Proceedings, 7th, Eger, Hung., Sept. 23-26, 1996 (1997), Meeting Date 1996, 316-319. Editor(s): Horvoelgyi, Z.; Nemeth, Zs.; Paszli, I. Hungarian

Chemical Society: Budapest, Hung.

CODEN: 65EWAR

DOCUMENT TYPE:

Conference; General Review

LANGUAGE: English

AB A review with 25 refs. on the prepn. of new F-alkylated glycolipids with mixed fluorocarbon/hydrocarbon double-chains as hydrophobic part and with a sugar moiety (glucose, galactose, mannose) as hydrophilic part. The prepn. strategy which does not require preliminary protection of the sugar consists in the condensation of an isocyanate deriv. bearing the perfluoroalkyl/alkyl tails with a sugar such as D-glucose or Me .alpha.-D-glucoside. We obsd. the selective formation of carbamates on

C-6 of glycopyranosic ring with excellent yields.

## => d 7 kwic

L14 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2002 ACS

AB . . . the prepn. of new F-alkylated glycolipids with mixed fluorocarbon/hydrocarbon double-chains as hydrophobic part and with a sugar moiety (glucose, galactose, mannose) as hydrophilic part. The prepn. strategy which does not require preliminary protection of the sugar consists in the condensation of an isocyanate deriv. bearing the perfluoroalkyl/alkyl tails with a sugar such as D-glucose or Me .alpha.-D-glucoside. We obsd. the selective formation of carbamates on C-6 of. .

## => d 8 ibib abs

L14 ANSWER 8 OF 19 USPATFULL

ACCESSION NUMBER:

96:97100 USPATFULL

TITLE:

Physiologically acceptable emulsions containing perfluorocarbon ether hydrides and methods of use

INVENTOR(S):

Moore, George G. I., Afton, MN, United States Flynn, Richard M., Mahtomedi, MN, United States Guerra, Miguel A., Woodbury, MN, United States

PATENT ASSIGNEE(S):

Minnesota Mining and Manufacturing Company, St. Paul,

MN, United States (U.S. corporation)

APPLICATION INFO.: RELATED APPLN. INFO.:

Division of Ser. No. US 1995-437299, filed on 17 May 1995, now patented, Pat. No. US 5502094 which is a continuation-in-part of Ser. No. US 1994-246962, filed on 20 May 1994, now patented, Pat. No. US 5476974

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Acquah, Samuel A.

LEGAL REPRESENTATIVE: Wood, Herron & Evans, P.L.L.

NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
LINE COUNT: 1296

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to physiologically acceptable emulsions of AB perfluorocarbon ether hydrides having 8 to 12 carbon atoms. These novel emulsions have various medical applications. They are especially useful medically as contrast media for various biological imaging modalities such as nuclear magnetic resonance, .sup.19 F-magnetic resonance imaging, ultrasound, x-ray, and computed tomography, as oxygen transport

agents or "artificial bloods" in the treatment of heart attack, stroke, and other vascular obstructions, as adjuvants to coronary angioplasty and in cancer radiation treatment and chemotherapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 9 ibib abs

L14 ANSWER 9 OF 19 USPATFULL

ACCESSION NUMBER:

96:24981 USPATFULL

TITLE:

Physiologically acceptable emulsions containing perfluorocarbon ether hydrides and methods for use

INVENTOR (S):

Moore, George G. I., Afton, MN, United States Flynn, Richard M., Mahtomedi, MN, United States Guerra, Miguel A., Woodbury, MN, United States

PATENT ASSIGNEE(S):

Minnesota Mining and Manufacturing Company, Saint

Paul,

MN, United States (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 5502094 19960326 US 1995-437299 19950517 (8)

APPLICATION INFO.: RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 1994-246962, filed

on 20 May 1994

DOCUMENT TYPE:

Utility Granted

FILE SEGMENT: PRIMARY EXAMINER:

LEGAL REPRESENTATIVE:

Acquah, Samuel A. Wood, Herron & Evans

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

19

LINE COUNT:

1241

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to physiologically acceptable emulsions of perfluorocarbon ether hydrides having 8 to 12 carbon atoms. These novel emulsions have various medical applications. They are especially useful medically as contrast media for various biological imaging modalities such as nuclear magnetic resonance, .sup.19 F-magnetic resonance imaging, ultrasound, x-ray, and computed tomography, as oxygen

transport

agents or "artificial bloods" in the treatment of heart attack, stroke, and other vascular obstructions, as adjuvants to coronary angioplasty and in cancer radiation treatment and chemotherapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 10 ibib abs

L14 ANSWER 10 OF 19 USPATFULL

ACCESSION NUMBER:

96:12805 USPATFULL

TITLE:

Immobilization of biomolecules on a fluorocarbon

surface with a poly(fluoroalkyl) sugar reagent Arentzen, Rene, Wilmington, DE, United States INVENTOR(S):

Jadhav, Prabhakar K., Wilmington, DE, United States Kobos, Robert K., Wilmington, DE, United States

Smart, Bruce E., Wilmington, DE, United States

E. I. Du Pont de Nemours and Company, Wilmington, DE, PATENT ASSIGNEE(S):

United States (U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_

US 5491083 PATENT INFORMATION: 19960213

US 1994-318398 19941005 APPLICATION INFO.:

Division of Ser. No. US 1993-63676, filed on 20 May RELATED APPLN. INFO.: 1993, now patented, Pat. No. US 5384254 which is a division of Ser. No. US 1990-586173, filed on 21 Sep

1990, now patented, Pat. No. US 5243037

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

Naff, David M. PRIMARY EXAMINER:

NUMBER OF CLAIMS: 16 EXEMPLARY CLAIM: 1 LINE COUNT: 1408

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Poly(fluoroalkyl) sugar reagents are prepared containing a sugar such as

a monosaccharide or a disaccharide to which are bonded a plurality of fluoroalkyl anchor groups capable of attaching to a fluorocarbon surface, and either a reactive group capable of covalent coupling to a biomolecule such as an enzyme or a charged group to form an

ion-exchanger or a non-ionic group to give a neutral fluorosurfactant.

Α spacer may be between the reactive group and the sugar. The poly(fluoroalkyl) sugar reagents are strongly adsorbed onto fluorocarbon

> surfaces to provide supports for such applications as separation and immobilization of biomolecules such as enzymes, carrying out heterogeneous diagnostic assays, and preparation of biosensors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 11 ibib abs

L14 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1

ACCESSION NUMBER: 1996:445244 CAPLUS

DOCUMENT NUMBER: 125:161606

Vesicles made of glycophospholipids with homogeneous TITLE:

(two fluorocarbon or two hydrocarbon) or

heterogeneous

(one fluorocarbon and one hydrocarbon) hydrophobic

double chains

Guillod, Frederic; Greiner, Jacques; Riess, Jean G. AUTHOR (S):

Unite de Chimie Moleculaire, Universite de CORPORATE SOURCE:

Nice-Sophia

Antipolis, CNRS URA 426, Parc Valrose, Nice, 06108/2,

Biochim. Biophys. Acta (1996), 1282(2), 283-292 SOURCE:

CODEN: BBACAQ; ISSN: 0006-3002

DOCUMENT TYPE: Journal English LANGUAGE:

The vesicle-forming ability of new anionic double chain AB glycophospholipids, with either two hydrocarbon or two perfluorocarbon chains, or a mixed double chain (one fluorinated, one hydrogenated), was investigated. When dispersed in water, some readily gave heat-sterilizable vesicles, 30-70 nm in diam. The galactose and mannose-based fluorinated vesicles were also highly stable on aging. The 6-substituted glucose derivs. formed tubules that reversibly interconverted into vesicles, depending on temp. The leakage rate in buffer of carboxyfluorescein or calcein from vesicles made from some of the glycophospholipids depended on the sugar (t1/2 galactose> mannose > qlucose). It decreased significantly with increasing fluorination and length of the hydrophobic tails. The mixed perfluorocarbon/hydrocarbon-tailed amphiphiles were found to be miscible with both the two fluorocarbon chains and the two hydrocarbon chains derivs. Such admixing tended, however, to increase the small unilamellar vesicles' permeability. In buffered serum, all the vesicles investigated were highly permeable, but incorporation of cholesterol or DSPC in vesicles made of le significantly reduced their permeability in serum. The new vesicle and membrane components have i.v. max. tolerated doses as high as 500 mg/kg body wt. in mice; hemolytic activity sharply decreases with increasing degree of fluorination.

### => d 12 ibib abs

L14 ANSWER 12 OF 19 USPATFULL

ACCESSION NUMBER: 95:7819 USPATFULL

Immobilization of biomolecules on a fluorocarbon TITLE:

surface modified with a poly(fluoroalkyl) sugar

reagent

Arentzen, Rene, Wilmington, DE, United States INVENTOR(S):

Jadhav, Prabhakar K., Wilmington, DE, United States Kobos, Robert K., Wilmington, DE, United States Smart, Bruce E., Wilmington, DE, United States

E. I. Du Pont de Nemours and Company, Wilmington, DE, PATENT ASSIGNEE(S):

United States (U.S. corporation)

KIND DATE NUMBER

19950124 PATENT INFORMATION: US 5384254 US 1993-63676 19930520 (8) APPLICATION INFO.:

Division of Ser. No. US 1990-586173, filed on 21 Sep RELATED APPLN. INFO.:

1990, now patented, Pat. No. US 5243037

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

Naff, David M. PRIMARY EXAMINER:

NUMBER OF CLAIMS: 24 EXEMPLARY CLAIM: 17 LINE COUNT: 1440

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Poly(fluoroalkyl) sugar reagents are prepared containing a sugar such AΒ as

a monosaccharide or a disaccharide to which are bonded a plurality of fluoroalkyl anchor groups capable of attaching to a fluorocarbon surface, and either a reactive group capable of covalent coupling to a biomolecule such as an enzyme or a charged group to form an ion-exchanger or a non-ionic group to give a neutral fluorosurfactant.

spacer may be between the reactive group and the sugar. The poly(fluoroalkyl) sugar reagents are strongly adsorbed onto fluorocarbon

surfaces to provide supports for such applications as separation and immobilization of biomolecules such as enzymes, carrying out heterogeneous diagnostic assays, and preparation of biosensors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 13 ibib abs

L14 ANSWER 13 OF 19 USPATFULL

ACCESSION NUMBER:

94:75454 USPATFULL

TITLE:

Process for enzyme immobilization on a fluorocarbon

surface

INVENTOR(S):

Arenzen, Rene, Wilmington, DE, United States

Boivin, Patrick, Nancy, France

Kobos, Robert K., Wilmington, DE, United States Scouten, William H., Hewitt, TX, United States Smart, Bruce E., Wilmington, DE, United States

PATENT ASSIGNEE(S):

E. I. du Pont de Nemours and Company, Wilmington, DE,

United States (U.S. corporation)

Baylor University, Waco, TX, United States (U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 5342772 19940830

APPLICATION INFO.:

US 1993-15939 19930210 (8)

RELATED APPLN. INFO.: Cont

Continuation of Ser. No. US 1990-586183, filed on 21

Sep 1990, now abandoned

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Naff, David M.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

T

LINE COUNT:

1275

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The fluorocarbon surface of a solid or liquid support is activated with a highly fluorinated isocyanate-modified ligand or with a reactive poly(fluoroalkyl) sugar reagent containing a polyhydroxy sugar to which are attached a plurality of fluoroalkyl anchor groups, a reactive group and optionally a spacer. The activated support has application in separation of biomolecules, immobilization of biomolecules, heterogeneous diagnostic assays, and biosensors. An enzyme or other biomolecule is immobilized by contacting the activated support surface with the enzyme in the presence of a surfactant. The surfactant is preferably a neutral surfactant such as a fluoroalkyl-polyoxyethylene.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 14 ibib abs

L14 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

1995:363397 CAPLUS

DOCUMENT NUMBER:

122:240217

TITLE:

Linkage position determination of lithium-cationized disaccharides by surface-induced dissociation tandem

mass spectrometry

AUTHOR(S):

Dongre, Ashok R.; Wysocki, Vicki H.

CORPORATE SOURCE:

Dep. Chem., Virginia Commonw. Univ., Richmond, VA,

23284-2006, USA

SOURCE: Org. Mass Spectrom. (1994), 29(11), 700-2

CODEN: ORMSBG; ISSN: 0030-493X

DOCUMENT TYPE: Journal LANGUAGE: English

AB Surface-induced dissocn. spectra of four isomers of mannosyl-

.alpha.(1.fwdarw.Y)-mannose (Y = 2-4, 6) on a 2-(

perfluoroctyl) ethanethiol monolayer surface on gold are reported.

#### => d 15 ibib abs

L14 ANSWER 15 OF 19 USPATFULL

ACCESSION NUMBER: 93:74419 USPATFULL

TITLE: Poly(fluoroalkyl) sugar reagents for surface

modification of supports

INVENTOR(S): Arentzen, Rene, Wilmington, DE, United States

Jadhav, Prabhakar K., Wilmington, DE, United States Kobos, Robert K., Wilmington, DE, United States Smart, Bruce E., Wilmington, DE, United States

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours and Company, Wilmington, DE,

United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5243037 19930907

APPLICATION INFO.: US 1990-586173 19900921 (7)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Naff, David M.
LEGAL REPRESENTATIVE: Siegell, Barbara C.

NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1,2
LINE COUNT: 1308

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Poly(fluoroalkyl) sugar reagents are prepared containing a sugar such as

a monosaccharide or a disaccharide to which are bonded multiple fluoroalkyl anchor groups capable of attaching to a fluorocarbon surface, and either a reactive group capable of covalent coupling to a biomolecule or a charged group to form an ion-exchanger or a non-ionic group to give a neutral fluorosurfactant. A spacer may be between the reactive group and the sugar. The poly(fluoroalkyl) sugar reagents are strongly adsorbed onto fluorocarbon surfaces to provide supports for such applications as separation and immobilization of biomolecules such as enzymes, carrying out heterogeneous diagnostic assays, and preparation of biosensors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

## => d 16 ibib abs

L14 ANSWER 16 OF 19 USPATFULL

ACCESSION NUMBER: 90:76889 USPATFULL

TITLE: Novel perfluoropolyethers

INVENTOR(S): Nappa, Mario J., Newark, DE, United States

Sievert, Allen C., Elkton, DE, United States Tong, Walter R., New Castle, DE, United States

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours and Company, Wilmington, DE,

## United States (U.S. corporation)

DATE NUMBER KIND \_\_\_\_\_ US 1990-480351 19901002 PATENT INFORMATION: 19900214 (7) APPLICATION INFO.:

Division of Ser. No. US 1989-303150, filed on 30 Jan RELATED APPLN. INFO.:

1989, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Mars, Howard T. LEGAL REPRESENTATIVE: Krukiel, Charles E.

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 389

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Novel perfluoropolyethers, such as perfluorodipentaerythritol hexaethyl ether, and their intermediates exhibit excellent chemical and thermal stability and are useful as vapor phase soldering fluids and convection cooling liquids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 17 ibib abs

L14 ANSWER 17 OF 19 USPATFULL

90:73469 USPATFULL ACCESSION NUMBER:

Perfluoroalkylthioglycosides TITLE:

Falk, Robert A., New City, NY, United States INVENTOR(S):

Clark, Kirtland P., Bethel, CT, United States Coughlin, Gregory R., Katonah, NY, United States

Ciba-Geigy Corporation, Ardsley, NY, United States PATENT ASSIGNEE(S):

(U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_ PATENT INFORMATION: US 4957904 19900918 APPLICATION INFO.: US 1989-353586 19890518 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1988-286553, filed

on 19 Dec 1988, now abandoned

DATE NUMBER \_\_\_\_\_\_ PRIORITY INFORMATION: CH 1988-1963 19880524

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Brown, Johnnie R. ASSISTANT EXAMINER: White, Everett

LEGAL REPRESENTATIVE: Hall, Luther A. R., Villamizar, JoAnn

19 NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1,16 LINE COUNT: 398

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Novel nonionic perfluoroalkylthioglycosides of the formula, R.sub.f -E-S-saccharide are described, wherein R.sub.f is a straight or

chain perfluoroalkyl of 1 to 18 carbon atoms or said perfluoroalkyl substituted by perfluoroalkoxy of 2 to 6 carbon atoms, E is a connecting

group, and the saccharide is a mono-, di-, or higher oligosaccharide, comprising 1 to 30 units of 5, 6 or 7 carbon-membered sugars.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 18 ibib abs

L14 ANSWER 18 OF 19 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 1987:382575 BIOSIS

DOCUMENT NUMBER: BA84:69072

TITLE: METABOLISM OF AN ISOLATED BRAIN PERFUSED WITH PERFLUORO

BLOOD SUBSTITUTE.

AUTHOR(S): MUKHERJI B; SLOVITER H A

CORPORATE SOURCE: DEP. BIOCHEM. BIOPHYSICS, SCH. MED., UNIV. PA.,

PHILADELPHIA, PA. 19104.

SOURCE: J BIOSCI (BANGALORE), (1987) 11 (1-4), 23-34.

CODEN: JOBSDN. ISSN: 0250-4774.

FILE SEGMENT: BA; OLD LANGUAGE: English

AB An unanesthetized, isolated, perfused rat brain, consisting of the skull and its contents with nearly all other tissues removed, has metabolic and electric activity similar to that of the brain of the intact rat with its blood-brain barrier intact. Its use yielded results that are difficult or impossible to obtain from in vitro preparations or in vivo. With the perfused brain it was shown that, mannose can completely replace glucose as metabolic substrate, that insulin has no direct effect on the brain, in the absence of added substrate glutamate is metabolized to aspartate, the brain does not metabolize ethanol, and morphine probably inhibits mitochondrial oxidative activity. Since the use of a perfluoro blood substitute to perfuse the brain avoids the optical interference caused by haemoglobin, it was possible to measure changes in the oxidation-reduction state of NADH by surface fluorometry of the cerebral cortex.

=> d 19 ibib abs

L14 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1978:597844 CAPLUS

DOCUMENT NUMBER: 89:197844

TITLE: Studies of the stability of reducing sugars towards

trifluoroacetolysis: a method for specific

elimination of 2-acetamido-2-deoxyhexose residues at

reducing ends of oligosaccharides

AUTHOR(S): Nilsson, Bo; Svensson, Sigfrid

CORPORATE SOURCE: Dep. Clin. Chem., Univ. Hosp., Lund, Swed.

SOURCE: Carbohydr. Res. (1978), 65(1), 169-71

CODEN: CRBRAT; ISSN: 0008-6215

DOCUMENT TYPE: Journal LANGUAGE: English

AB Trifluoroacetolysis of pentoses, hexoses, 6-deoxyhexoses,

2-deoxy-D-erythro-pentose, 2-deoxy-D-lyxo-hexose, 2-amino-2-deoxy-D-qalactose, 2-acetamido-2-deoxy-D-glucose, and -D-mannose with

1:1, 1:2, and 50:1 (CF3CO)20-CF3CO2H mixts. at 100.degree. for 48 h

showed

that the presence of a 2-O-CF3CO group is essential in the perfluoroacetates of the reducing sugars for stabilization towards acid-catalyzed degrdn. E.g., hexoses with 1:1 and 50:1 reagents gave the corresponding pertrifluoroacetates in quant. yield; 2-acetamido-2-deoxy

sugars were converted into their pertrifluoroacetates and then gradually transamidated to give the N-trifluoroacetates, which were stable in 50:1 reagent but were severely degraded by 1:1 and 1:2 reagents. Trifluoroacetolysis of .alpha.-D-Manp-(1.fwdarw.3)-.beta.-D-Manp-(1.fwdarw.4)-D-GlcNAc with 1:1 and 1:2 reagents gave pertrifluoroacetylated .alpha.-D-Manp-(1.fwdarw.3)-D-man in nearly quant. yield.

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=> s paramagnetic

L1 77270 PARAMAGNETIC

=> s diamagnetic

L2 19814 DIAMAGNETIC

=> s perfluoro
=> s perfluoro?

L3 74627 PERFLUORO?

=> s 11(1)12(1)13

L4 19 L1(L) L2(L) L3

=> dup rem 14

PROCESSING COMPLETED FOR L4

L5 19 DUP REM L4 (0 DUPLICATES REMOVED)

=> d ibib abs

L5 ANSWER 1 OF 19 USPATFULL

ACCESSION NUMBER: 2002:119300 USPATFULL

TITLE: DIAGNOSTIC IMAGING OF LYMPH STRUCTURES

INVENTOR(S): MATTREY, ROBERT F., SAN DIEGO, CA, UNITED STATES

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: GRAY CARY WARE & FREIDENRICH, 4365 EXECUTIVE DRIVE,

SUITE 1600, SAN DIEGO, CA, 921212189

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM: 1 LINE COUNT: 1390

AB In accordance with the present invention, there are provided methods

for

identifying the sentinel lymph node in a drainage field for a tissue or organ in a subject. In select embodiments, the invention allows for the identification of the first or sentinel lymph node that drains the tissue or organ, particularly those tissues associated with neoplastic or infectious diseases and disorders, and within the pertinent lymph drainage basin. Once the drainage basin from the tissue or organ, i.e., the sentinel lymph node, is identified, a pre-operative or intraoperative mapping of the affected lymphatic structure can be carried out with a contrast agent. Identification of the first or sentinel lymph node, on the most direct drainage pathway in the

drainage

field, can be accomplished by a variety of imaging techniques, including

ultrasound, MRI, CT, nuclear and others. Moreover, once the lymphatic structure is identified as being associated with neoplastic or infectious diseases and disorders, the affected lymphatic structure can be removed surgically or by a suitable minimally invasive procedure to allow pathological analysis to be performed to determine whether

certain

diseases or disorders exist, without resort to more radical lymphadenectomy. Further, the agent can be made to carry diagnostic or therapeutic probes to be activated and/or delivered to the injection site or any part of the lymphatic pathway downstream from the injection site.

## => d kwic

L5 ANSWER 1 OF 19 USPATFULL

SUMM . . . that are different from the corresponding properties of the tissue being imaged. Either an imageable nucleus (such as .sup.19F), radionuclides, diamagnetic, paramagnetic,

ferromagnetic, superparamagnetic substances, and the like, can be used with appropriate MRI equipment.

SUMM . . . preferred contrast agent may comprise a microbubble preparation

wherein the microbubbles are associated with an MRI agent such as a paramagnetic material.

SUMM . . . stabilizing agents for microbubble preparations. The term "fluorocarbon" is used herein in its broadest sense and includes fully fluorinated compounds (perfluorocarbons) as well as partially fluorinated hydrocarbon materials (fluorochemicals or fluorinated compounds), including unsubstituted chains or those substituted with another halogen. . .

SUMM . . . fluorotrimethylcyclobutanes, fluorobutanes, fluorocyclobutanse,

fluoropropanes, fluoroethers, fluoropolyethers, fluorotriethylamines, and the like. Particularly preferred embodiments of the present invention employ microbubbles comprising perfluorohexanes, perfluoropentanes, perfluorobutanes,

perfluoropropanes, sulfur hexafluoride, and the like. One particular preferable class of compatible compounds comprises flouroethers. Other useful gases or vapors comprise. . .

SUMM . . . because contrast agents of a primary modifier gas such as air or nitrogen (including fluorocarbon gases) saturated with a selected perfluorocarbon osmotic agent can grow rather than shrink when exposed to air dissolved in a liquid due to the osmotic pressure exerted

by the perfluorocarbon gas or vapor. Preferably, the osmotic

agent is relatively impermeable to the contrast agent film and thus remains inside the contrast agent. Air or other gases inside the contrast agent are diluted by the perfluorocarbon, which acts to slow the air diffusion flux out of the contrast agent. This gas osmotic pressure is proportional to the concentration gradient of the perfluorocarbon vapor across the contrast agent film, the concentration of air surrounding the contrast agent, and the ratio of the contrast agent film permeability to air and to perfluorocarbon.

SUMM

[0055] Further, as disclosed in U.S. Pat. No. 5,315,997, gases and perfluorocarbon vapors have magnetic susceptibilities substantially different from tissues and blood. Therefore, microbubble contrast agents comprising fluorinated compounds will cause changes. also be used for magnetic resonance visualization. Other exemplary MRI agents, which may be used with the present invention comprise paramagnetic and supraparamagnetic macromolecular compounds or particulates that may be associated with microbubbles (i.e. on the . . be found in U.S. Pat. Nos. 4,675,173 membrane) or mixed with a. and 4,849,210, each of which is incorporated herein by reference. With respect to paramagnetic compounds, gadolinium diethylenetriaminepentaacetic acid (Gd-DTPA), and transition metal ions of iron and manganese may be used in conjunction with the.

## => d 2 ibib abs

ANSWER 2 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:373378 CAPLUS

TITLE:

DFT Calculation of NMR JFF Spin-Spin Coupling

Constants in Fluorinated Pyridines

AUTHOR(S):

Barone, Veronica; Peralta, Juan E.; Contreras, Ruben

H.; Snyder, James P.

CORPORATE SOURCE:

Departamento de Fisica FCEyN, Universidad de Buenos

Aires, Buenos Aires, Argent.

SOURCE:

Journal of Physical Chemistry A (2002), 106(23),

5607-5612

CODEN: JPCAFH; ISSN: 1089-5639

PUBLISHER: American Chemical Society

DOCUMENT TYPE:

Journal LANGUAGE: English

All four isotropic contributions to the NMR fluorine-fluorine coupling consts. (Fermi contact, FC, spin-dipolar, SD, paramagnetic spin-orbit, PSO, and diamagnetic spin-orbit, DSO) have been calcd. for 2,6-difluoropyridine, 2,4,6-trifluoropyridine, perfluoropyridine, and 2-Br-3,4,5,6,7,8-hexafluoroquinoline by means of d. functional theory in combination with the rather modest 6-311G\*\* basis set. Exptl. values ranging from -20.3 to +45.8 Hz are semiquant. reproduced for three- to seven-bond couplings, suggesting that the different electronic effects responsible for the spin-spin interactions are adequately taken into account. In all cases, the relative importance of noncontact terms was examd. With few exceptions, the sum of the SD and PSO noncontact terms is larger than the FC contact contribution, even though in most cases the two noncontact values have opposite signs. The widespread assumption that the Fermi contact term dominates scalar spin-spin couplings in the case of light atoms would appear to be an oversimplification for JFF in polyfluorinated org. mols. In addn., the CPU performance of the Fermi contact contribution calcd. sep. by the coupled-perturbed and the finite-perturbation methods was investigated showing the latter to be slightly more efficient.

REFERENCE COUNT: THERE ARE 56 CITED REFERENCES AVAILABLE FOR 56

THIS

FORMAT

=> d 3 ibib abs

ANSWER 3 OF 19 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:246519 CAPLUS

DOCUMENT NUMBER:

134:271318

TITLE:

Contrast agent formulations containing

paramagnetic and diamagnetic

perfluoroalkyl compounds for magnetic

resonance tomography

INVENTOR(S):

Platzek, Johannes; Niedballa, Ulrich; Raduchel,

Bernd;

Mareski, Peter; Misselwitz, Bernd; Frenzel, Thomas;

Weinmann, Hanns-Joachim

PATENT ASSIGNEE(S):

Schering Aktiengesellschaft, Germany

SOURCE:

Eur. Pat. Appl., 73 pp.

DOCUMENT TYPE:

CODEN: EPXXDW Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE EP 1088558 A2 20010404 EP 2000-250323 20000928

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

DE 1999-19948651 A 19990929 US 1999-158307P P 19991008

The invention concerns galenic formulations to be used as contrast agents AB for lymph node magnetic resonance tomog. that contain paramagnetic and diamagnetic perfluoroalkyl compds.

Paramagnetic perfluoroalkyl gadolinium complexes,

diamagnetic perfluoroalkyl compds. and their

formulations are described. Thus, a piperazinyltetraazacyclododecane contg. gadolinium complex was dissolved in 0.45% NaCl soln. (pH 7.4, 0.25 mg/L CaNa3DTPA) to yield 280 mmol/L; 3.17 g of synthesized

6-[1-0-.alpha.-D-mannopyranosyl] hexanoic acid N-(3-oxa-

1H, 1H, 2H, 2H, 4H, 4H, 5H, 5H-perfluorodecyl) amide and 0.9% NaCl soln.

were added. The mixt. was treated at 60.degree.C in an ultrasonic bath. After cooling to room temp., pH was set to 7.4 with 2 N Sodium hydroxide. The soln. was filtered through 0.2 .mu.m filter; the filtrate was used as contrast agent.

=> d 4 ibib abs

ANSWER 4 OF 19 USPATFULL

2001:199793 USPATFULL ACCESSION NUMBER:

Gas barrier film TITLE:

Komada, Minoru, Tokyo-to, Japan INVENTOR(S):

NUMBER KIND DATE \_\_\_\_\_\_ PATENT INFORMATION: US 2001038894 A1 20011108 APPLICATION INFO.: US 2001-804816 A1 20010313 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-76354	20000314
	JP 2000-302729	20001002
	JP 2000-318013	20001018
	JP 2000-318014	20001018
DOCUMENT TYPE:	Utility	

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Ladas & Parry, Suite 1200, 224 South Michigan Aveune,

Chicago, IL, 60604

NUMBER OF CLAIMS: 14 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 11 Drawing Page(s)

LINE COUNT: 1968

AB The purpose of the present invention is to provide a gas barrier film having extremely excellent gas barrier property while retaining the film

thickness at a predetermined thickness. A gas barrier film having a silicon oxide film formed by the plasma CVD method on the one side or both sides of a base material is provided, the silicon oxide film is characterized in that the film is comprised of the rate of components that the number of Oxygen atoms is from 170 to 200 and the number of Carbon atoms is 30 or less to the number of Si atoms of 100, and that further the film has a peak position of IR absorption band based on the stretching vibration of Si-O-Si that exist between 1055 and 1065 cm.sup.-1.

## => d 5 ibib abs

L5 ANSWER 5 OF 19 USPATFULL

ACCESSION NUMBER: 2001:121551 USPATFULL

TITLE: 3-heteroatom substituted cyclopentadienyl-containing

metal complexes and olefin polymerization process

INVENTOR(S): Klosin, Jerzy, Midland, MI, United States

Kruper, Jr., William J., Sanford, MI, United States

Nickias, Peter N., Midland, MI, United States Patton, Jasson T., Midland, MI, United States Wilson, David R., Midland, MI, United States

PATENT ASSIGNEE(S): Dow Chemical Company, Midland, MI, United States (U.S.

corporation)

·		NUMBER	KIND	DATE	
PATENT INFORMATION:	US	6268444	B1	20010731	
	WO	9806727		19980219	
APPLICATION INFO.:	US	1999-230185		19990115	(9)
	WO	1997-US13170		19970728	
				10000115	DOM '

19990115 PCT 371 date 19990115 PCT 102(e) date

NUMBER DATE

PRIORITY INFORMATION: US 1996-34819P 19961219 (60) US 1996-23768P 19960808 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wu, David W.
ASSISTANT EXAMINER: Harlan, R.

NUMBER OF CLAIMS: 17 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 5329

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention relates to heteroatom substituted cyclopentadienyl-containing ligands, metal complexes containing these ligands, catalyst systems prepared from catalyst components comprising these metal complexes. The metal complexes contain a "a" heteroatom-Cp bond or a ring heteroatom-Cp bond in the 3-position of the Cp. In preferred metal complexes the ligand is a 3-heteroatom substituted indenyl group. The catalyst systems for olefin polymerization may be used at high temperatures, are highly active and produce high molecular weight polymer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 5 kwic

L5 ANSWER 5 OF 19 USPATFULL

DETD . . . quantity with the amount of oxidized metal complex formed at the working electrode. Preferred supporting electrolytes are tetrahydrocarbylammonium salts of tetrakis(perfluoroary1) borates having from 1 to 10 carbons in each hydrocarbyl or perfluoroary1 group, especially tetra(n-

butylammonium) tetrakis (pentafluorophenyl) borate.

DETD . . . a radical cation in which the titanium is in a formal oxidation

state of (III), which may exist in a diamagnetic or paramagnetic form as shown below. ##STR10##

=> d 6 ibib abs

L5 ANSWER 6 OF 19 USPATFULL

ACCESSION NUMBER: 2000:109469 USPATFULL

TITLE: Fuel-cells system

INVENTOR(S): Nitta, Shoichiro, Aichi-ken, Japan

Taki, Masayoshi, Konan, Japan Kawahara, Tatsuya, Toyota, Japan Miura, Morimichi, Gamagouri, Japan

PATENT ASSIGNEE(S): Toyota Jidosha Kabushiki Kaisha, Toyota, Japan

(non-U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6106963 20000822 APPLICATION INFO.: US 1998-72667 19980505 (9)

NUMBER DATE

PRIORITY INFORMATION: JP 1997-141059 19970515
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wong, Edna

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1,3

NUMBER OF DRAWINGS: 16 Drawing Figure(s); 15 Drawing Page(s)

LINE COUNT: 1725

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A fuel-cells system 20 is equipped with an oxygen enrichment unit 34

and

supplies air whose oxygen partial pressure has been increased by the oxygen enrichment unit 34 to fuel cells 40 as oxidizing gas. The oxygen enrichment unit 34 is a magnetic oxygen enrichment device that effects oxygen enrichment utilizing the fact that the oxygen molecule is paramagnetic and when magnetized migrates toward a magnetic pole side. Specifically, a magnetic field is generated inside the oxygen

enrichment

unit 34 by an electromagnet, air compressed by a compressor unit 32 is supplied to the oxygen enrichment unit 34, and compressed oxygen-enriched air is discharged from the vicinity of the magnetic poles in the oxygen enrichment unit 34 and supplied to the fuel cells 40.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 7 ibib abs

L5 ANSWER 7 OF 19 USPATFULL

ACCESSION NUMBER: 2000:12565 USPATFULL

TITLE: Positive-chargeable toner, image forming method and

apparatus unit

INVENTOR(S): Fujimoto, Masami, Shizuoka-ken, Japan

Tanikawa, Hirohide, Shizuoka-ken, Japan

Onuma, Tsutomu, Yokohama, Japan Fujikawa, Hiroyuki, Numazu, Japan

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Tokyo, Japan (non-U.S.

corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6020102 20000201 APPLICATION INFO.: US 1998-110023 19980702 (9)

NUMBER DATE

PRIORITY INFORMATION: JP 1997-178752 19970704

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Martin, Roland

LEGAL REPRESENTATIVE: Fitzpatrick, Cella, Harper & Scinto

NUMBER OF CLAIMS: 102 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT: 2905

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A positive-chargeable toner is disclosed which has a binder resin, a colorant and a charge control agent. The binder resin contains a styrene

copolymer and has an acid value of from 0.5 to 50.0 mg KOH/g, and the charge control agent has an imidazole derivative represented by the Formula (1). Also, an image forming method and an apparatus unit,

making

use of the positive-chargeable toner, are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

#### => d 8 ibib abs

L5 ANSWER 8 OF 19 USPATFULL

ACCESSION NUMBER: 1998:138329 USPATFULL

TITLE: Reaction products of lyotropic liquid crystal salt

complexes

INVENTOR(S): Elliott, Stanley B., 7125 Conelly Blvd., Walton Hills,

OH, United States 44146

NUMBER KIND DATE

PATENT INFORMATION: US 5833877 19981110
APPLICATION INFO.: US 1996-676775 19960708 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-447990, filed

on 23 May 1995, now patented, Pat. No. US 5595683

which

is a continuation of Ser. No. US 1994-239619, filed on 9 May 1994, now patented, Pat. No. US 5443753 which is a continuation-in-part of Ser. No. US 1992-821084, filed on 16 Jan 1992, now patented, Pat. No. US

5354496

which is a continuation-in-part of Ser. No. US 1991-642009, filed on 16 Jan 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-562017, filed on 2 Aug 1990, now patented, Pat. No. US 5082588 which is a division of Ser. No. US 1989-444559, filed on 1 Dec 1989, now patented, Pat. No. US 4975249 which is a continuation of Ser. No. US 1987-78186, filed on

27 Jul 1987, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wu, Shean C.

LEGAL REPRESENTATIVE: Marshall & Melhorn

NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
LINE COUNT: 4205

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides novel non-polymeric and polymeric complexes and reaction products of lyotropic liquid crystal salts of aroyl acids

which

when anhydrous are excellent electrical conductors and superconductors of high critical temperature. The salts can be of various metals but especially of the alkali metals. The invention also provides reaction products of the complexes with copper metal, the products having excellent tarnish-resistant properties which make them suitable for protecting circuit boards and such from corrosion during storage. Copper/polymeric aroylacrylate salt reaction products when amorphous, especially when present in a thin film form, make superconductors of high critical temperature and current. Further, the invention provides

а

flexible process for converting various essential, water-bearing components of these complexes and reaction products into stable, anhydrous solutions well suited for applying to various substrates. A modification of the process provides products which can be used to coat substrates which wet poorly. Thin films of the alkali metal polymeric lyotropic liquid crystal salt complexes, because of their affinity for water, which is accompanied by a rapid, sensitive change in electrical resistance, make excellent hygrometric devices. They are especially

suited for monitoring processes which require that these complexes, reaction products, and complexation products be maintained in the anhydrous state, since the hygrometer sensor material's electrical response parallels that of the product being produced, rising to very high resistances as the anhydrous state is approached.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 9 ibib abs

ANSWER 9 OF 19 USPATFULL

96:36271 USPATFULL ACCESSION NUMBER:

Polymeric shells for medical imaging prepared from TITLE:

synthetic polymers, and methods for the use thereof

Grinstaff, Mark W., Pasadena, CA, United States INVENTOR (S):

Desai, Neil P., Los Angeles, CA, United States Suslick, Kenneth S., Champaign, IL, United States Soon-Shiong, Patrick, Los Angeles, CA, United States Sandford, Paul A., Los Angeles, CA, United States

Merideth, Noma R., Pacific Palisades, CA, United

States

Vivorx Pharmaceuticals, Inc., Santa Monica, CA, United PATENT ASSIGNEE(S):

States (U.S. corporation)

DATE NUMBER KIND -----

US 5512268 19960430 PATENT INFORMATION: 19950606 (8) US 1995-486268 APPLICATION INFO.:

Division of Ser. No. US 1994-326116, filed on 19 Oct RELATED APPLN. INFO.:

1994 which is a continuation of Ser. No. US

1993-35150,

filed on 26 Mar 1993, now patented, Pat. No. US

5362478

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Hollinden, Gary E.

Pretty, Schroeder, Brueggemann & Clark, Reiter, LEGAL REPRESENTATIVE:

Stephen

NUMBER OF CLAIMS: 37 EXEMPLARY CLAIM: 2241 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

In accordance with the present invention, compositions comprising imaging agent(s) contained within polymeric shells are provided. Invention compositions are useful, for example, as contrast agents for magnetic resonance imaging (MRI), ultrasonography, and X-ray computer tomography. The polymeric shell diameter is typically approximately 2 microns in diameter. Consequently, these materials have organ specificity due to rapid scavenging by the reticuloendothial system (RES) or the mononuclear phagocyte (MNP) system upon intravenous injection. Furthermore, polymeric shells of the invention can be used

to

measure and monitor local oxygen and temperature. Exemplary contrast agents contemplated for use in the practice of the present invention include fluorinated compounds. Fluorinated compounds in general are hydrophobic and as such have limited water solubility. The invention method permits preparation of such compounds in a biocompatible form suitable for ready delivery.

## => d 9 kwic

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L5 ANSWER 9 OF 19 USPATFULL
```

- SUMM . . . atoms to be used as CT contrast agent. One particular class of CT contrast agents are brominated fluorocarbons such as perfluorocctylbromide (PFOB).
- SUMM Perfluorooctylbromide has been effectively used in a number of indications as a CT contrast agent including: 1) determination of acute renal. . .
- SUMM Paramagnetic cations such as, for example, Gd, Mn, and Fe are excellent MRI contrast agents, as suggested above. Their ability to.
- SUMM . . . contrast. Thus the use of other active MRI nuclei (such as fluorine) can, therefore, be advantageous. The use of certain perfluorocarbons in various diagnostic imaging technologies such as ultrasound, magnetic resonance, radiography and computer tomography has been described in an article. . .
- SUMM Another medical imaging application for **perfluorocarbon** filled polymeric shells is ultrasonography. This non-invasive, non-iodizing radiation medical imaging technique is safe and currently used world-wide for a. . .
- SUMM . . . improve the resolution of the acquired image. One class of materials that have been used as ultrasonography contrast agents are perfluorohalocarbons.
- Another medical imaging application for polymeric shells is electron paramagnetic resonance (EPR) imaging and spectroscopy. This non-invasive, non-iodizing radiation medical spectroscopy and imaging technique is safe and currently in preclinical. . .
- SUMM As a further embodiment of the present invention, paramagnetic cations such as Gd, Mn, Fe, and the like can be bound to polyanions, such as alginate, and used as.
- SUMM . . . structures from the surrounding medium. As used herein, the term imaging agent embraces contrast agents, such as organofluorine compounds, oils, paramagnetic compounds, paramagnetic or superparamagnetic particles, stable free radicals, and the like.
- SUMM . . . desired area. Consequently, it is possible to image where this polymeric shell contrast agent resides within the body as a diamagnetic T2 agent. Thus, this unique polymeric shell containing any number of different fluorocarbons can be used as both a .sup.19. . .
- SUMM . . . kcal/mole). For comparison, carbon-hydrogen bonds (approximately 100 kcal/mole) are weaker and much more reactive. The
- FDA

  has approved two fluorocarbons, perfluorotripropyl amine and
  perfluorodecalin, for medicinal use as blood substitutes under
  the trade name of Fluosol DA.
- C.sub.x F.sub.2x, such as, for example, perfluoro-1-hexene (C.sub.6 F.sub.12), perfluoro-2-hexene (C.sub.6 F.sub.12), perfluoro-3-hexene (C.sub.6 F.sub.12), and the like,
- SUMM cyclo-C.sub.x F.sub.2x, such as, for example,
  perfluorocyclohexane (C.sub.6 F.sub.12),
  perfluorocyclooctane (C.sub.8 F.sub.16), and the like,
- C.sub.x F.sub.2x-2, such as, for example, perfluoro-1-hexyne (C.sub.6 F.sub.10), perfluoro-2-hexyne (C.sub.6 F.sub.10), perfluoro-3-hexyne (C.sub.6 F.sub.10), and the like,
- SUMM bicyclo-C.sub.x F.sub.2x-2, such as, for example,

perfluorodecalin (C.sub.10 F.sub.18), and the like, C.sub.x F.sub.2x+2, such as, for example, perfluorononane SUMM (C.sub.9 F.sub.20), perfluorodecane (C.sub.10 F.sub.22), perfluorododecane (C.sub.12 F.sub.26), and the like, C.sub.x F.sub.2x-4, such as, for example, perfluoro SUMM -2,4-hexadiene, and the like, C.sub.x F.sub.2x+1 A, such as, for example, perfluorotripropyl
amine [(C.sub.3 F.sub.7).sub.3 N], perfluorotributyl amine SUMM [(C.sub.4 F.sub.9).sub.3 N.sub.], perfluoro-tert-tributyl amine, and the like, SUMM Besides linear, branched-chain and cyclic fluorine-containing compounds as noted above, fluorinated crown ethers (such as, for example, perfluoro 12-crown-4, perfluoro 15-crown-5, perfluoro 18-crown-6, and the like) are also contemplated for use in the practice of the present invention. SUMM Besides diamagnetic T2 contrast agents, the polymeric shells of the invention can be used as ferromagnetic or paramagnetic magnetic resonance contrast agents. These agents introduce a local magnetic field where they are present and consequently change the relaxation. . polymeric shell composed of an iron containing protein, such SUMM as hemoglobin. This hemoglobin polymeric shell may contain either a liquid (perfluorocarbon, soybean oil, and the like) or may be gas (argon, nitrogen, helium, and the like). This iron containing protein in vivo functions to deliver oxygen to the cell. This protein has paramagnetic properties in both its Fe.sup.+2 deoxy state and Fe.sup.+3 state. This paramagnetic property will introduce a local magnetic field and disrupt the original magnetic field present. Single molecules of deoxy hemoglobin (as. . . shells according to the present invention that contain approximately 10.sup.7 Hb molecules crosslinked together) have been previously used as a paramagnetic susceptibility contrast agent (Ogawa et al., Mag. Reson. Med. 14:68 (1990); Turner et al., Magn. Reson. Med. 22:159 (1991); Wendland. SUMM oxygen detection is based upon the dramatic changes in NMR relaxation rate of .sup.19 F in the presence of a paramagnetic species such as oxygen. Since oxygen is paramagnetic, it will interact with the fluorine nucleus, increasing the relaxation rate of .sup.19 F from the excited state to the. . system lies, for example, in 1) the use of MRI to obtain SUMM oxygen information, 2) the use of the oxygen paramagnetic influence on the .sup.19 F MRI (NMR) signal, 3) the use of polymeric shells to provide a constant and protective. . be used over a wide temperature range, simply by changing the SUMM makeup of the imaging agent composition. For example, pure perfluoro-dodecane (C.sub.12 F.sub.26) entrapped in a polymeric shell will undergo a solid to liquid phase transition at the melting . . will have a lower and broader melting point range than the corresponding pure components. Accordingly, for example, (i.e., mixing) perfluorododecane with a lower molecular weight fluorocarbon will broaden the melting point range of the encapsulated composition. SUMM be added can also be used in the practice of the present invention. For example, a dehydration coupling reaction between

perfluoro-tert-butanol (t-C.sub.4 F.sub.9 --OH; PCR CHEMICALS)

with any of the above-described reactive oxygen-containing compounds will produce a molecule that undergoes a. .

SUMM

Ultrasonography contrast agents can be developed with polymeric shells of the invention (i.e., filled with fluorocarbon contrast agent). For example, perfluorohalocarbons such as perfluorooctylbromide (PFOB) have properties that are

significantly different than water, tissues, organs, and bones. One

such

property is density. PFOB has.

Perfluorooctylbromide has been used effectively as an SUMM ultrasound agent in a number of indications including: 1) imaging specific tumors in the liver and spleen with PFOB (Mattrey et al., Radiology 145:759-762 (1982)); 2) imaging the liver with perfluorodecalin and perfluorotripropylamine (Mattrey, R. F. J., Ultrasound Med. 2:173-176 (1983)); 3) evaluating acute

myocardial infarction with PFA and PFOB (Mattrey, R. F.. Besides PFOB encapsulated in a polymeric shell, smaller molecular SUMM weight

fluorocarbons are equally valuable. For example, perfluoropentane can be encapsulated into the polymeric shell. This perfluorocarbon is a liquid at room temperature, however at 37.degree. C. it is a gas. Thus, when injected, the perfluorocarbon in the polymeric shell will undergo a phase transition, i.e., from liquid to gas. This change in physical state

will

attenuate the ultrasonic waves, producing good contrast. Thus, perfluoropentane and the like encapsulated in polymeric shells will be good contrast agents.

Perfluorohalocarbons, such as perfluorooctylbromide SUMM (PFOB), are also radiopaque and can be used as contrast agents for

computer tomography. Thus, polymeric shells filled with. Another medical imaging application for polymeric shells is in electron SUMM paramagnetic resonance (EPR) imaging and spectroscopy. This non-invasive, non-iodizing radiation medical spectroscopy and imaging technique is safe and currently in preclinical.

=> d 10 ibib abs

ANSWER 10 OF 19 USPATFULL

96:31573 USPATFULL ACCESSION NUMBER:

Non-fluorinated polymeric shells for medical imaging TITLE: Grinstaff, Mark W., Pasadena, CA, United States INVENTOR(S): Desai, Neil P., Los Angeles, CA, United States Suslick, Kenneth S., Champaign, IL, United States

Soon-Shiong, Patrick, Los Angeles, CA, United States Sandford, Paul A., Los Angeles, CA, United States Merideth, Noma R., Pacific Palisades, CA, United

States

PATENT ASSIGNEE(S): Vivorx Pharmaceuticals, Inc., Santa Monica, CA, United

States (U.S. corporation)

NUMBER KIND DATE US 5508021 19960416 PATENT INFORMATION: US 1994-326116 19941019 (8) APPLICATION INFO.:

Continuation of Ser. No. US 1993-35150, filed on 26 RELATED APPLN. INFO.:

Mar

1993, now patented, Pat. No. US 5362478

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Hollinden, Gary E.

LEGAL REPRESENTATIVE: Pretty, Schroeder, Brueggemann & Clark, Reiter,

Stephen

NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 2169

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In accordance with the present invention compositions comprising

imaging

agent(s) contained within polymeric shells are provided. Invention compositions are useful, for example, as contrast agents for magnetic resonance imaging (MRI), ultrasonography, and X-ray computer

tomography.

The polymeric shell diameter is typically approximately 2 microns in diameter. Consequently, these materials have organ specificity due to rapid scavenging by the reticuloendothial system (RES) or the mononuclear phagocyte (MNP) system upon intravenous injection. Furthermore, polymeric shells of the invention can be used to measure and monitor local oxygen and temperature. Exemplary contrast agents contemplated for use in the practice of the present invention include fluorinated compounds. Fluorinated compounds in general are hydrophobic and as such have limited water solubility. The invention method permits preparation of such compounds in a biocompatible form suitable for

ready

delivery.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 11 ibib abs

L5 ANSWER 11 OF 19 USPATFULL

ACCESSION NUMBER: 96:29265 USPATFULL

TITLE: Method for the preparation of fluorocarbon-containing

polymeric shells for medical imaging

INVENTOR(S): Grinstaff, Mark W., Pasadena, CA, United States

Desai, Neil P., Los Angeles, CA, United States Suslick, Kenneth S., Champaign, IL, United States Soon-Shiong, Patrick, Los Angeles, CA, United States Sandford, Paul A., Los Angeles, CA, United States Merideth, Noma R., Pacific Palisades, CA, United

States

PATENT ASSIGNEE(S): Vivorx Pharmaceuticals, Inc., Santa Monica, CA, United

States (U.S. corporation)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-326116, filed on 19 Oct

1994 which is a continuation of Ser. No. US

1993-35150,

filed on 26 Mar 1993, now patented, Pat. No. US

5362478

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Hollinden, Gary E.

Pretty, Schroeder, Brueggemann & Clark, Reiter, LEGAL REPRESENTATIVE:

Stephen

NUMBER OF CLAIMS: 36 EXEMPLARY CLAIM: LINE COUNT: 2263

In accordance with the present invention, compositions comprising imaging agent(s) contained within polymeric shells are provided. Invention compositions are useful, for example, as contrast agents for magnetic resonance imaging (MRI), ultrasonography, and X-ray computer tomography. The polymeric shell diameter is typically approximately 2 microns in diameter. Consequently, these materials have organ specificity due to rapid scavenging by the reticuloendothial system (RES) or the mononuclear phagocyte (MNP) system upon intravenous

injection. Furthermore, polymeric shells of the invention can be used

to

measure and monitor local oxygen and temperature. Exemplary contrast agents contemplated for use in the practice of the present invention include fluorinated compounds. Fluorinated compounds in general are hydrophobic and as such have limited water solubility. The invention method permits preparation of such compounds in a biocompatible form suitable for ready delivery.

#### => d 12 ibib abs

INVENTOR(S):

ANSWER 12 OF 19 USPATFULL

ACCESSION NUMBER:

94:104312 USPATFULL

Insoluble salts of lanthanides for the visual display TITLE:

using nuclear magnetic resonance, of the

gastro-intestinal tract Aime, Silvio, Milan, Italy

Botta, Mauro, Milan, Italy

Bracco S.p.A., Milan, Italy (non-U.S. corporation) PATENT ASSIGNEE(S):

KIND DATE NUMBER -----PATENT INFORMATION: US 5368839 19941129 WO 9116079 19911031 APPLICATION INFO .: US 1992-941069 19921106 (7) WO 1991-EP679 19910409

19921106 PCT 371 date 19921106 PCT 102(e) date

DATE NUMBER \_\_\_\_\_\_

PRIORITY INFORMATION: IT 1990-2002690 19900412

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Hollinden, Gary E. LEGAL REPRESENTATIVE: Bucknam and Archer

NUMBER OF CLAIMS: 10 EXEMPLARY CLAIM:

1 Drawing Figure(s); 1 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT:

AB Diagnostic compositions particularly useful for NMR imaging of the gastrointestinal tract, comprise physiologically acceptable aqueous suspensions of insoluble salts of lanthanides, buffered, if required, a pH value between 6.0 and 8.5 and which are, if required, formulated with appropriate insoluble organic or inorganic additives and/or with dispersing agents, suspending agents or viscosity-enhancing agents. These compositions are capable of increasing the value of the r.sub.2 /r.sub.1 ratio, in which r.sub.1 and r.sub.2 are the longitudinal and transversal relaxivities of the protons of the surrounding water, thus permitting the production of clear images which have negative contrast and which lack artefacts of metallic type.

#### => d 13 ibib abs

L5 ANSWER 13 OF 19 USPATFULL

ACCESSION NUMBER: 90:42485 USPATFULL

TITLE: Metal oxide/hydroxide particles coated with phosphate

esters

INVENTOR(S): Martin, Edward S., New Kensington, PA, United States

Wieserman, Larry F., Apollo, PA, United States

PATENT ASSIGNEE(S): Aluminum Company of America, Pittsburgh, PA, United

States (U.S. corporation)

DISCLAIMER DATE: 20061003

RELATED APPLN. INFO.: Continuation of Ser. No. US 1987-23312, filed on 9 Mar

1987, now patented, Pat. No. US 4871411 which is a continuation-in-part of Ser. No. US 1986-946870, filed

(7)

on 29 Dec 1986, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Konopka, Paul E. LEGAL REPRESENTATIVE: Alexander, Andrew

NUMBER OF CLAIMS: 36 EXEMPLARY CLAIM: 20

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 761

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An active material is disclosed comprising metal oxide/hydroxide particles having chemically bonded to reactive sites on a surface thereof, a monolayer of a phosphorous-containing organic material comprised of a phosphorous-containing group and a carbon-containing group. The bond to the metal oxide/hydroxide particle surface is formed by reaction of the phosphorous-containing group with the metal

oxide/hydroxide particle surface, so that the carbon-containing group of

the material is oriented away from the metal oxide/hydroxide surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

## => d 14 ibib abs

INVENTOR(S):

L5 ANSWER 14 OF 19 USPATFULL

ACCESSION NUMBER: 90:40358 USPATFULL

TITLE: Clay magnetic resonance contrast agents for

gastrointestinal comsumption or introduction Bryant, Robert G., Pittsford, NY, United States Listinsky, Jay J., Rochester, NY, United States
PATENT ASSIGNEE(S): The University of Rochester, Rochester, NY, United

States (U.S. corporation)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Warden, Robert J.
ASSISTANT EXAMINER: Spiegel, Jack
LEGAL REPRESENTATIVE: LuKacher, Martin

NUMBER OF CLAIMS: 7 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT: 278

Contrast medium compositions for delineation of bowel during magnetic resonance imaging (MRI) of the abdomen are provided for oral or rectal administration. The compositions consist of aqueous suspensions of clay in finely-divided particles which expose a large surface area to the suspending water and impose a condition of dynamic anisotropy upon the adjacent water, resulting in reduction predominantly in the transverse relaxation time of the water and subsequent loss of signal from the bowel lumen.

#### => d 15 ibib abs

DISCLAIMER DATE:

L5 ANSWER 15 OF 19 USPATFULL

ACCESSION NUMBER: 89:92249 USPATFULL

TITLE: Supercritical fluid chromatography packing material

containing alumina

INVENTOR(S): Khosah, Robinson P., Point Breeze, PA, United States
Novak, John W., New Kensington, PA, United States

Novak, John W., New Kensington, PA, United States Weaver, Douglas G., Monroeville, PA, United States Fraser-Milla, Karen R., Wilkinsburg, PA, United States

Burr, Richard R., Leechburg, PA, United States

PATENT ASSIGNEE(S): Aluminum Company of America, Pittsburgh, PA, United

States (U.S. corporation)

20060328

RELATED APPLN. INFO.: Continuation of Ser. No. US 1987-90880, filed on 31

Διια

1987, now patented, Pat. No. US 4816159

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Therkorn, Ernest G. LEGAL REPRESENTATIVE: Alexander, Andrew

NUMBER OF CLAIMS: 10 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT: 657

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of separating organic or organometallic materials

under supercritical fluid conditions, the method comprising the steps

of

providing a bed of packing material selected from a metal oxide/hydroxide support material having phsophorous-containing organic molecules bonded to reactive sites on said support material, alumina

and

alumina-containing mixtures. The materials are introduced to the bed

and

a fluid is added to the bed under supercritical fluid conditions. The fluid removes one of the materials from the bed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 16 ibib abs

L5 ANSWER 16 OF 19 USPATFULL

ACCESSION NUMBER:

89:82585 USPATFULL

TITLE:

Active material produced from metal oxide/hydroxide

particles and phosphate esters

INVENTOR(S):

Matin, Edward S., New Kensington, PA, United States

Wieserman, Larry F., Apollo, PA, United States

PATENT ASSIGNEE(S):

Aluminum Company of America, Pittsburgh, PA, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 4871711 19891003

APPLICATION INFO.:

US 1987-23312 19870309 (7) Continuation-in-part of Ser. No. US 1986-946870, filed

RELATED APPLN. INFO.: Continuation-in-part of Ser. 1 on 29 Dec 1986, now abandoned

DOCUMENT TYPE:

Utility

FILE SEGMENT:

Granted

PRIMARY EXAMINER:

Konopka, Paul E.

LEGAL REPRESENTATIVE:

NUMBER OF DRAWINGS:

Alexander, Andrew, Taylor, John P.

NUMBER OF CLAIMS:

1

EXEMPLARY CLAIM:

1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT:

760

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A

An active material is disclosed comprising metal oxide/hydroxide particles having chemically bonded to reactive sites on a surface thereof, a monolayer of a phosphorous-containing organic material comprised of a phosphorous-containing group and a carbon-containing group. The bond to the metal oxide/hydroxide particle surface is formed by reaction of the phosphorous-containing group with the metal oxide/hydroxide particle surface, so that the carbon-containing group

of

the material is oriented away from the metal oxide/hydroxide surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 17 ibib abs

L5 ANSWER 17 OF 19 USPATFULL

ACCESSION NUMBER:

89:23115 USPATFULL

TITLE:

Supercritical fluid chromatography packing material Khosah, Robinson P., Point Breeze, PA, United States Novak, John W., New Kensington, PA, United States

INVENTOR(S):

Weaver, Douglas G., Monroeville, PA, United States Fraser-Milla, Karen R., Wilkinsburg, PA, United States

19890328

19870831 (7)

Burr, Richard R., Leechburg, PA, United States

Aluminum Company of America, Pittsburgh, PA, United

States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 4816159 APPLICATION INFO.: US 1987-90880

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Therkorn, Ernest G.

LEGAL REPRESENTATIVE: Alexander, Andrew

NUMBER OF CLAIMS: 21 EXEMPLARY CLAIM: 21

PATENT ASSIGNEE(S):

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT: 733

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a method of separating organic or organometallic materials under supercritical fluid conditions, the method comprising the steps of

providing a bed of packing material selected from a metal oxide/hydroxide support material having phosphorous-containing organic molecules bonded to reactive sites on said support material, alumina

alumina-containing mixtures. The materials are introduced to the bed and

a fluid is added to the bed under supercritical fluid conditions. The fluid removes one of the materials from the bed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 18 ibib abs

and

L5 ANSWER 18 OF 19 USPATFULL

ACCESSION NUMBER: 88:77470 USPATFULL

TITLE: Adsorbent comprising metal oxide/hydroxide particles

reacted with one or more phosphorous-containing materials having selected organic radicals attached

thereto

INVENTOR(S): Wieserman, Larry F., Apollo, PA, United States

Wefers, Karl, Apollo, PA, United States

Cross, Kathryn, Murrysville, PA, United States

Martin, Edward S., New Kensington, PA, United States Aluminum Company of America, Pittsburgh, PA, United

PATENT ASSIGNEE(S): Aluminum Company of America

States (U.S. corporation)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1986-946870, filed

on 29 Dec 1986, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Shine, W. J.

LEGAL REPRESENTATIVE: Alexander, Andrew, Taylor, John P.

NUMBER OF CLAIMS: 5

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

8 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

An active material is disclosed comprising metal oxide/hydroxide particles having chemically bonded to reactive sites on a surface thereof, a monolayer of a phosphorous-containing organic material comprised of a phosphorous-containing group and a carbon-containing group. The bond to the metal oxide/hydroxide surface is formed by reaction of the phosphorous-containing group with the metal

oxide/hydroxide particle surface, so that the carbon-containing group

of

the material is oriented away from the metal oxide/hydroxide surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

#### => d 19 ibib abs

ANSWER 19 OF 19 USPATFULL

ACCESSION NUMBER:

85:57955 USPATFULL

TITLE:

Liposomes containing modified cholesterol for organ

targeting

INVENTOR(S):

Ryan, Patrick J., Worcester, MA, United States Davis, Michael A., Westwood, MA, United States Melchior, Donald L., Framingham, MA, United States Trustees University of Massachusetts, Amherst, MA,

19830620 (6)

PATENT ASSIGNEE(S):

United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

19851001 US 4544545

APPLICATION INFO.:

US 1983-505696 Utility

DOCUMENT TYPE:

Granted

FILE SEGMENT: PRIMARY EXAMINER:

Nucker, Christine M.

LEGAL REPRESENTATIVE:

Cook, Paul J.

NUMBER OF CLAIMS:

12

EXEMPLARY CLAIM:

1

LINE COUNT:

201

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Phospholipid liposomes are provided having an outer layer including a cholesterol derivative such as a cholesterol ester and an aqueous

medium

confined by the layer which includes a tracer agent, a cytoxic agent or a therapeutic agent. The liposomes are adapted for specific organ targeting.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

#### => d 19 kwic

### ANSWER 19 OF 19 USPATFULL

. . . metrizamide, iothalamate or the like which are useful in DETD fluoroscopy, plain film X-ray, angiography, digital subtraction angiography and computed tomography; diamagnetic and paramagnetic substances such as perfluorohydrocarbons,

nitroxide free radicals, phosphates, magnesium, gadolinium or the like, which are useful in nuclear magnetic resonance imaging or gaseous

agents.

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